1-1 Name Date

Homework

Use the fraction bar below for Exercises 1–4.

1. Label the first part of this fraction bar with the correct unit fraction.

2. Circle the first four parts of the bar. What fraction of the whole does this circled portion represent?

_____

3. Write your fraction from Exercise 2 as a sum of unit fractions.

_____

4. Represent the whole as the sum of the unit fractions.

_____

5. Solve the problem below by circling parts of the fraction bar. Write the appropriate equation below the bar.

   Brett is building a fence around his yard. He has worked on it for two weeks so far. He finished $\frac{2}{8}$ the first week and $\frac{3}{8}$ the second week. What fraction of the entire fence has he built?

_____

Eighths 

6. Nena thinks that because $4 < 6$, it must also be true that $\frac{1}{4} < \frac{1}{6}$. Explain to Nena why this is incorrect.

_____

_____

_____

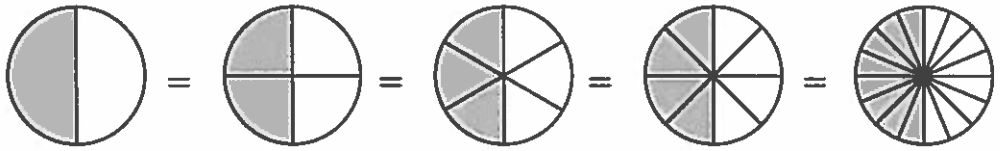
_____

1-2

Homework

Name _____ Date _____

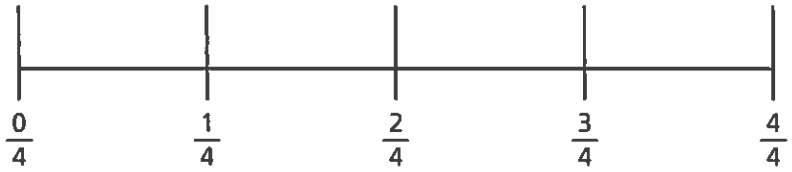
1. Write a chain of equivalent fractions for the shaded parts.



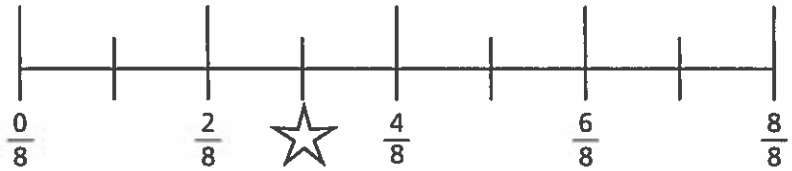
_____ = _____ = _____ = _____ = _____

Use the number lines to complete Exercises 2–7.

Fourths



Eighths



Twelfths

2. What fraction is marked by the star? _____

3. What fraction is marked by the heart? _____

4. If you have $\frac{3}{4}$ cup of flour, how many eighths do you have?

_____

5. If you have $\frac{3}{12}$ of an orange, how many fourths do you have?

_____

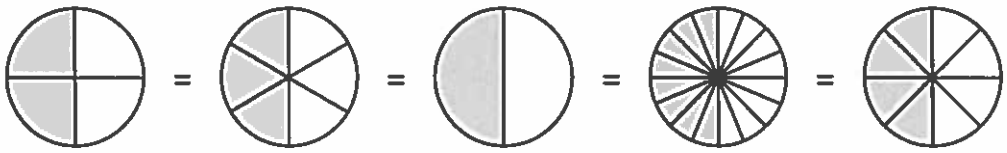
6. Which is greater, $\frac{3}{4}$ or $\frac{10}{12}$? _____

7. Give two equivalent fractions for $\frac{6}{8}$. _____

1-3 Name _____ Date _____

Homework

1. Write a chain of equivalent fractions for the shaded parts.



_____ = _____ = _____ = _____ = _____

Write the multiplier or divisor for each pair of equivalent fractions.

2. $\frac{4}{12} = \frac{1}{3}$

Divisor = _____

3. $\frac{2}{9} = \frac{6}{27}$

Multiplier = _____

4. $\frac{6}{60} = \frac{1}{10}$

Divisor = _____

5. $\frac{3}{10} = \frac{15}{50}$

Multiplier = _____

6. $\frac{21}{56} = \frac{3}{8}$

Divisor = _____

7. $\frac{5}{7} = \frac{30}{42}$

Multiplier = _____

8. $\frac{4}{16} = \frac{1}{4}$

Divisor = _____

9. $\frac{5}{9} = \frac{25}{45}$

Multiplier = _____

10. $\frac{10}{60} = \frac{1}{6}$

Divisor = _____

11. $\frac{3}{7} = \frac{18}{42}$

Multiplier = _____

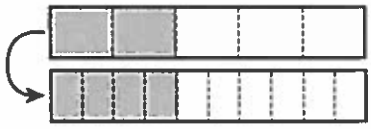
12. $\frac{24}{56} = \frac{3}{7}$

Divisor = _____

13. $\frac{5}{6} = \frac{35}{42}$

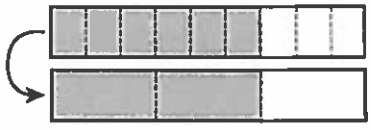
Multiplier = _____

Complete each exercise about the pairs of fraction bars.



14. What equivalent fractions are shown? _____

15. Identify the multiplier. _____



16. What equivalent fractions are shown? _____

17. Identify the divisor. _____

18. Write a chain with at least six equivalent fractions.

_____ = _____ = _____ = _____ = _____ = _____

1-4

Homework

Name _____ Date _____

Compare.

1. $\frac{5}{8} \bigcirc \frac{5}{9}$
2. $\frac{1}{5} \bigcirc \frac{1}{4}$
3. $\frac{2}{5} \bigcirc \frac{3}{5}$
4. $\frac{6}{8} \bigcirc \frac{2}{3}$
5. $\frac{10}{11} \bigcirc \frac{11}{12}$
6. $\frac{3}{8} \bigcirc \frac{5}{12}$
7. $\frac{5}{12} \bigcirc \frac{4}{7}$
8. $\frac{1}{3} \bigcirc \frac{4}{9}$
9. $\frac{1}{4} \bigcirc \frac{2}{9}$
10. $\frac{1}{12} \bigcirc \frac{1}{15}$
11. $\frac{7}{10} \bigcirc \frac{11}{15}$
12. $\frac{12}{25} \bigcirc \frac{51}{100}$

Solve. *Show your work.*

13. During his first season on the school football team, Wade made 5 of the 9 field goals he tried. During his second season, he made 11 of the 15 field goals he tried. In which season did he make the greater fraction of the field goals he tried?

_____

14. Mañuela bought $\frac{11}{12}$ yard of polka dot fabric and $\frac{7}{9}$ yard of flowered fabric. Which fabric did she buy more of?

_____

15. Of the 7 pens in Ms. Young's desk, 3 are blue. Of the 9 pens in Mr. Fox's desk, 5 are blue. Which teacher has a greater fraction of pens that are blue?

_____

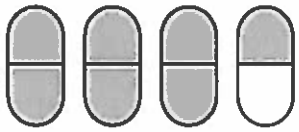
16. Mr. Sommers spent 10 minutes of his 50-minute math period reviewing homework. Mr. Young spent 12 minutes of his 60-minute math period reviewing homework. Which teacher spent a greater fraction of his math period reviewing homework?

_____

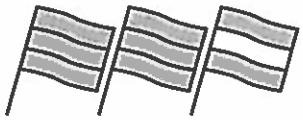
1-5 Name _____ Date _____

Homework

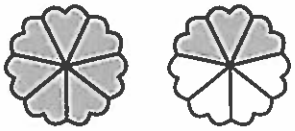
Name the mixed number shown by the shaded parts.



1. _____



2. _____



3. _____

Write the mixed number as a fraction.

4. $2\frac{1}{3} =$ _____

5. $4\frac{2}{5} =$ _____

6. $3\frac{3}{4} =$ _____

7. $1\frac{5}{8} =$ _____

Write the fraction as a mixed number.

8. $\frac{7}{6} =$ _____

9. $\frac{8}{3} =$ _____

10. $\frac{9}{2} =$ _____

11. $\frac{10}{7} =$ _____

Complete. Give the answer as a mixed number.

12. $\frac{3}{5} + \frac{4}{5} =$ _____

13. $\frac{6}{4} + \frac{3}{4} =$ _____

14. $\frac{2}{9} + \frac{8}{9} =$ _____

15. $7 + \frac{2}{3} =$ _____

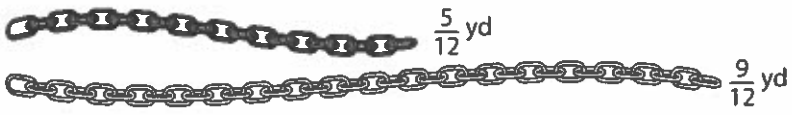
Solve. *Show your work.*

16. Alicia walked $\frac{7}{8}$ mile on Saturday and $\frac{6}{8}$ mile on Sunday. How far did she walk over the weekend? Give the answer as a mixed number.

_____

17. The dark chain is $\frac{5}{12}$ yard long. The light one is $\frac{9}{12}$ yard long. How long will they be if they are joined? Give the answer as a mixed number.

_____



1-6 Name _____ Date _____

Homework

Add or subtract.

1. $\frac{3}{5} + \frac{4}{5}$
2. $\frac{6}{4} + \frac{3}{4}$
3. $4\frac{2}{9} + 2\frac{7}{9}$
4. $1\frac{7}{8} + 3\frac{3}{8}$
5. $1\frac{7}{9} - \frac{4}{9}$
6. $4\frac{6}{7} - 2\frac{5}{7}$
7. $6\frac{4}{5} - 3\frac{2}{5}$
8. $25\frac{5}{8} - 10\frac{1}{8}$
9. $4\frac{1}{2} + 5\frac{1}{2}$
10. $3\frac{1}{7} + 2\frac{1}{7}$
11. $1\frac{5}{7} + 1\frac{3}{7}$
12. $50\frac{1}{3} + 50\frac{1}{3}$
13. $2 - \frac{1}{3}$
14. $5\frac{3}{8} - 2\frac{7}{8}$
15. $2\frac{1}{6} - 1\frac{5}{6}$

Solve. *Show your work.*

16. I made a clay snake $9\frac{5}{8}$ inches long, but a section $1\frac{7}{8}$ inches long broke off. How long is the snake now?

_____

17. A group of campers hiked for $5\frac{3}{4}$ hours today and $6\frac{3}{4}$ hours yesterday. How many hours did they hike in all?

_____

18. Deacon had $12\frac{1}{3}$ ounces of juice, but he drank $3\frac{2}{3}$ ounces. How much juice is left?

_____

1-7

Homework

Name _____ Date _____

Add.

1. $\frac{1}{3} + \frac{1}{2}$

2. $\frac{7}{10} + \frac{1}{5}$

3. $\frac{2}{9} + \frac{1}{6}$

4. $\frac{5}{32} + \frac{1}{4}$

5. $\frac{1}{6} + \frac{2}{3}$

6. $\frac{5}{11} + \frac{1}{2}$

7. $\frac{3}{16} + \frac{3}{4}$

8. $\frac{3}{7} + \frac{1}{3}$

9. $\frac{5}{12} + \frac{3}{8}$

Solve. *Show your work.*

10. Of the people who attended the school play, $\frac{5}{12}$ were students and $\frac{1}{8}$ were teachers. What fraction of the total audience were students or teachers?

_____

11. Mara bought $\frac{2}{3}$ yard of yellow ribbon and $\frac{1}{4}$ yard of blue ribbon. How many yards of ribbon did she buy altogether?

_____

12. For breakfast, Oliver drank $\frac{5}{16}$ of a pitcher of juice. His brother Joey drank $\frac{3}{8}$ of the pitcher of juice. What fraction of a pitcher did they drink together?

_____

13. A recipe calls for $\frac{1}{3}$ cup of brown sugar and $\frac{3}{4}$ cup of white sugar. How much sugar is this altogether?

_____

1-8 Name _____ Date _____

Homework

Subtract.

1. $\frac{1}{3} - \frac{1}{7}$

2. $\frac{4}{5} - \frac{8}{15}$

3. $\frac{5}{6} - \frac{2}{9}$

4. $\frac{61}{100} - \frac{7}{25}$

5. $\frac{4}{7} - \frac{1}{6}$

6. $\frac{6}{11} - \frac{1}{2}$

Circle the greater fraction. Then write and solve a subtraction problem to find the difference of the fractions.

7. $\frac{9}{10}$ $\frac{11}{12}$ _____

8. $\frac{5}{18}$ $\frac{1}{3}$ _____

Solve. *Show your work.*

9. Marly passes the library on her way to school. The distance from Marly's house to the library is $\frac{3}{8}$ mile. The distance from Marly's house to the school is $\frac{4}{5}$ mile. How far is it from the library to Marly's school?

_____

10. Tim spends about $\frac{1}{3}$ of each weekday sleeping and about $\frac{7}{24}$ of each weekday in school.

    a. What fraction of a weekday does Tim spend either sleeping or in school?

    _____

    b. Is this more or less than $\frac{1}{2}$ a day? _____

    c. How much more or less? _____

1-9

Homework

Name _____ Date _____

Add or subtract.

1. $7\frac{1}{2} + 6\frac{5}{8}$

2. $2\frac{3}{5} + 5\frac{1}{4}$

3. $5\frac{3}{8} + 2\frac{3}{4}$

4. $3\frac{4}{15} - 1\frac{1}{5}$

5. $9\frac{5}{6} - 4\frac{1}{8}$

6. $1\frac{1}{9} + 3\frac{5}{8}$

7. $8\frac{1}{6} - 2\frac{7}{12}$

8. $6\frac{7}{9} - 4\frac{2}{3}$

9. $3\frac{9}{14} - 1\frac{2}{7}$

Solve. *Show your work.*

10. Last year my elm tree was $8\frac{5}{6}$ feet tall. This year it is $10\frac{1}{12}$ feet tall. How much did it grow in one year?

_____

11. Luis rode his bicycle $2\frac{3}{10}$ miles before lunch. He rode $1\frac{1}{4}$ miles after lunch. How far did Luis ride altogether?

_____

12. Carrie spent $2\frac{1}{2}$ hours trimming bushes and $1\frac{1}{4}$ hours weeding the garden. She is supposed to work in the yard for 5 hours. How much longer does she need to work?

_____

Homework

Name _____ Date _____

Add or subtract.

1. $3 - 1\frac{2}{5}$

2. $2\frac{7}{10} + 2\frac{4}{5}$

3. $7\frac{5}{9} - 3\frac{2}{15}$

4. $4\frac{5}{6} + \frac{6}{7}$

5. $5\frac{1}{8} - 4\frac{1}{5}$

6. $4\frac{79}{100} + 5\frac{9}{10}$

7. $\frac{13}{16} + \frac{2}{3}$

8. $8\frac{1}{4} - 3\frac{9}{20}$

9. $7\frac{8}{9} + 9\frac{7}{8}$

Solve.

10. The Taylors have four dogs. Molly eats $4\frac{1}{2}$ cups of food each day, Roscoe eats $3\frac{2}{3}$ cups, Milo eats $1\frac{3}{4}$ cups, and Fifi eats $\frac{3}{4}$ cup. How much do the Taylors' dogs eat each day altogether?

_____

11. Refer to Problem 10. How much more food does Molly eat each day than Roscoe?

_____

12. The vet told the Taylors (from Problem 10) to decrease the amount Molly eats by $\frac{3}{4}$ cup. After Molly's food is adjusted, will she eat more or less than Roscoe each day? How much more or less?

_____

1-11 Name _____ Date _____

Homework

Use benchmarks of 0, $\frac{1}{2}$, and 1 to estimate the sum or difference. Then find the actual sum or difference.

1. $\frac{2}{5} + \frac{4}{7}$
   Estimate: _____
   Sum: _____

2. $\frac{13}{20} - \frac{3}{10}$
   Estimate: _____
   Difference: _____

3. $\frac{13}{18} + \frac{1}{2}$
   Estimate: _____
   Sum: _____

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

4. $3\frac{5}{8} - 1\frac{1}{2}$
   Estimate: _____
   Difference: _____

5. $6\frac{4}{9} + 5\frac{7}{12}$
   Estimate: _____
   Sum: _____

6. $7\frac{11}{18} - 4\frac{1}{15}$
   Estimate: _____
   Difference: _____

Tell whether the answer is reasonable or unreasonable. Explain how you decided.

7. $2\frac{1}{5} + 5\frac{1}{3} = 7\frac{8}{15}$

8. $\frac{7}{8} - \frac{2}{11} = \frac{9}{19}$

9. $\frac{3}{8} + \frac{4}{5} = \frac{7}{40}$

10. $4\frac{1}{3} - 1\frac{5}{6} = 2\frac{1}{2}$

Solve.

11. Estimate the difference $8\frac{7}{12} - 4\frac{7}{8} - \frac{4}{10}$.
    Explain how you found the answer.

1-12

Homework

Name _____ Date _____

Solve. Explain why your answer is reasonable. *Show your work.*

1. Zoe had a board $5\frac{1}{4}$ feet long. She cut off a piece. Now the board is $3\frac{5}{6}$ feet long. How long was the piece she cut off?

   Answer: _____

   Why is the answer reasonable?

   _____

   _____

2. A rectangle has a length of $10\frac{3}{16}$ inches and a width of $6\frac{7}{8}$ inches. What is the perimeter of the rectangle?

   Answer: _____

   Why is the answer reasonable?

   _____

   _____

3. Max is making trail mix. He combines $\frac{2}{5}$ pound of dried fruit and $\frac{1}{3}$ pound of mixed nuts. He adds sunflower seeds to make a total of 1 pound. What is the weight of the seeds?

   Answer: _____

   Why is the answer reasonable?

   _____

   _____

4. At the start of party, a bowl contains 16 pints of punch. Guests drink $10\frac{1}{4}$ pints. Then the host adds another $7\frac{1}{2}$ pints to the bowl. How much punch is in the bowl now?

   Answer: _____

   Why is the answer reasonable?

   _____

   _____

1-13

Name _____ Date _____

Homework

In the space below, design and sketch a bird hotel. Assume your design will be made from wood, and includes these characteristics.

- Walls not exposed to weathering are $\frac{1}{4}$-inch thick.
- Walls exposed to weathering are $\frac{1}{2}$-inch thick.
- The rooms are identical.

State the number of birds your design will accommodate, and the dimensions of one room. Then use the dimensions to compute the overall length, width, and height of your hotel.